Proposed Policy for the Retirement of a ccTLD

Contents

1 Background and Introduction

1.1 Background

At its meeting on 10 December 2015 the ccNSO Council discussed the launch of the formal ccNSO Policy Development Process to address the lack of Policy with respect to the Retirement of ccTLDs, as well as a Review Mechanism for decisions pertaining to the Delegation, Transfer, Revocation and Retirement of ccTLDs.

To increase the predictability and legitimacy of decisions pertaining to the Retirement of ccTLDs and in accordance with the recommendations of the ccNSO Delegation and Redelegation Working Group (DRDWG) in 2011[1], the void or lack of Policy relating to the Retirement of ccTLDs needs to be filled by a Policy developed by the ccNSO. However, at the time the DRDWG also recommended that such a ccNSO PDP should be launched following the development of a Framework of Interpretation of RFC 1591.

Following initial discussions by the ccNSO Council, input and feed-back was sought from the ccTLD community at the Marrakesh (ICANN55) and Helsinki (ICANN56) meetings. At its meeting in Helsinki (ICANN56) the ccNSO Council launched the ccNSO Policy Development Process 3.

On 9 March 2017, the Issue Manager submitted the Final Issue Report to Council.

Following the discussions by the ccNSO Council, feed-back and input from the community and the drafting team, the Issue Manager recommended:

> *The ccNSO Council initiates one (1) ccNSO Policy Development Process to develop Policy proposals for both a Review Mechanism and on the Retirement of ccTLDs.*

> *The initial focus needs to be on developing a Review Mechanism, which is considered the highest priority, particularly in light of the IANA Stewardship transition. Only then the focus should be on Retirement, and, if needed, revisit the Review Mechanism to include decisions relating to the Retirement of ccTLDs. To appoint two Working Groups each with its own charter, working method and schedule.*

However, at the meeting in Copenhagen (ICANN58, March 2017), the ccTLD community present suggested to change the order in which the topics need to be addressed. Analyses showed that alternating the order would save at least 3 months and simplify the process. Effectively this meant that by reversing the order, to first develop Retirement Policy proposals and then those for the Review Mechanism, the potential Review Mechanism would be available sooner to the community.

The ccNSO Council initiated the 3rd ccNSO Policy Development Process (ccPDP3) in March 2017 by adopting the Issue Report. Accordingly, the ccPDP3 Working Group to develop policy recommendations for the Retirement of ccTLDs was established by June 2017. The Charter of this WG was included in the Issue Report and is available at:

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[1] See DRD WG Final Report, page 19, http://ccnso.icann.org/workinggroups/drd-wg-final-report-07mar11-en.pdf and Council Decision 16 March 2011, http://ccnso.icann.org/workinggroups/minutes-council-16mar11-en.pdf

The ccPDP3 Retirement WG was tasked to develop policy proposals to address at a minimum the following topics and issues identified in the Issue Report:

- Consistency of terminology
- What triggers a Retirement?
- Who triggers a Retirement process?
- Additional conditions for Retirement of a ccTLD? What are the conditions for actual Retirement of a ccTLD? Is the occurrence of a triggering event sufficient or should additional requirements be in place?
- Compliance with conditions? Assuming the Retirement of a ccTLD is conditional, who will monitor, and who will be held accountable, if at all, if requirements are not met?

As the activities of the WG are undertaken within the framework of the ccNSO Policy Development Process, the limitations with respect to the scope of a ccPDP, specifically by Article 10 and Annexes B and C to the ICANN Bylaws, limit the scope of the WG's work and proposals.

Further, the ccPDP3 Retirement WG was tasked to report to the ccNSO Council on topics or issues which they identified and considered out of scope for the WG. Accordingly, the Chair of the WG informed the ccNSO Council and Issue Manager that the ccPDP3 Retirement WG identified two issues, which need to be addressed, but were considered out of scope of ccPDP3:

1. The ccNSO membership definition (section 10.4 (a) of the ICANN Bylaws). The membership definition was changed as part of the IANA Stewardship Transition process.
2. The events that would trigger the Retirement of IDN ccTLDs. The Retirement WG advised Council that the events leading the de-selection of IDN ccTLDs should be identified under a ccPDP that also defines the selection of IDN ccTLD strings.

1.2 Introduction

Request for Comment ("RFC") 1591 states:

> *4. Rights to Names*
>
> *[...]*
>
> *2) Country Codes*
>
> *The IANA is not in the business of deciding what is and what is not a country. The selection of the ISO 3166 list as a basis for country code top-level domain names was made with the knowledge that ISO has a procedure for determining which entities should be and should not be on that list.*

In 2014 the ccNSO through its Framework of Interpretation confirmed that RFC 1591 applies to ccTLDs.

The ISO 3166-1 list is not static and country codes are added and removed on a regular basis. When a new ISO 3166-1 Alpha-2 code element (Alpha-2 code) is added, a ccTLD corresponding to that Alpha-2 code can be added to the Root by the IANA Naming Functions Operator (IFO). However, as was identified in 2011 by the ccNSO Delegation and Redelegation Working Group, there is no formal policy available for the removal of a ccTLD from the Root Zone when a Country Code is deleted from the ISO 3166-1 list of country names.

It is important to note that ccTLDs are defined as those entries in the Root Zone database identified as such; these include:

- 2 letter ccTLDs corresponding to an ISO 3166-1 Alpha-2 Code Element (the majority of ccTLDs).
- 2 letter Latin ccTLDs not corresponding to an ISO 3166-1 Alpha-2 Code Element [2].
- IDN ccTLDs as approved by ICANN.

2 Policy Objective

The objective of the Policy is to provide clear and predictable guidance and to document a process that is orderly and reasonable up and to, but excluding, the removal of a ccTLD from the Root Zone[3].

3 Applicability of the Policy

This Policy applies to all entries in the Root Zone database which are identified as ccTLDs and are subject to a Retirement Triggering Event (Trigger).

Retirement Triggering Events are defined as follows:

- For 2 letter ccTLDs which corresponded to an ISO 3166-1 Alpha-2 Code Element – The Trigger is the deletion of that corresponding Alpha-2 Code Element from the ISO 3166-1 Standard by the ISO 3166-1 Maintenance Agency ("ISO 3166/MA")
- For 2 letter Latin ccTLDs which do not correspond to an ISO 3166-1 Alpha-2 Code Element **–** The Trigger is the ISO 3166-1 MA making a change (other than making it an ISO 3166-1 Alpha-2 Code Element) to any of these. For each such Triggering Event the IFO will consider if the change requires deleting that ccTLD. If the ccTLD Manager disagrees with the IFO's decision to initiate the Retirement process it can appeal the decision using the ccTLD Appeals Mechanism.
- For IDN ccTLDs – The Triggering Event will be identified in the Policy on the (de-)selection of IDN ccTLD strings, the development of which was initiated on 21 May 2020[4] and which applies to all

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[2] The ccTLDs .uk and .ac which refer to exceptionally reserved codes UK and AC are grandfathered as ccTLDs and .eu, which corresponds to the exceptionally reserved code EU, was delegated under the relevant ICANN Board resolution from September 2000 (https://www.icann.org/resources/board-material/minutes-2000-09-25-en)

[3] The removal of a (cc)TLD by the IFO is excluded from the policy, as this is outside of the policy scope of the ccNSO.

[4] See Issue Report ccPDP4 as adopted:
https://community.icann.org/display/ccnsowkspc/Policy+Development+Process+%28ccPDP4%29+-+%28de-%29selection+of+IDN+ccTLD+Strings?preview=/138969190/138969196/ISSUE%20report%20ccPDP%204%20version%20final%20-%2014%20May.pdf

IDN ccTLDs.

For the purposes of this Policy a Functional Manager is the entity listed as "ccTLD Manager" in the IANA Root Zone database or any later variant, who is active with respect to the management of the ccTLD or with whom the IFO can officially and effectively communicate.

If a ccTLD is to be retired but does not have a Functional Manager, the IFO cannot transfer responsibility to a new Manager according to its standard process. This set of circumstances would create a deadlock situation which would prevent the IFO from ever retiring the ccTLD. To avoid such a deadlock, and only under these specific conditions, this Policy allows the IFO to proceed with a Transfer of responsibility for the ccTLD to establish a Functional Manager and ensure the ccTLD can be retired. Such a Transfer should follow the IFO Transfer Process where possible.

4 Retirement Process

4.1 Expectations

There is a good faith obligation for both the IFO and the Manager of the retiring ccTLD to ensure an orderly shutdown of the retiring ccTLD which takes into consideration the interests of its registrants and the stability and security of the DNS.

Note: Given the importance and exceptional nature of the ccTLD Retirement Process the IFO, prior to sending a Notice of Removal (see next section), should contact the ccTLD Manager and confirm who the IFO should be dealing with regarding the Retirement Process. The person or role identified by the ccTLD Manager to deal with the Retirement Process is referred to as the Retirement Contact and in the remainder of this document the use of the term ccTLD Manager should be understood to mean ccTLD Manager or Retirement Contact if one has been formally identified to the IFO by the ccTLD Manager.

4.2 Notice of Removal

Once the IFO confirms that a Retirement Triggering Event has occurred and that the ccTLD should be retired and has a Functional Manager, it shall promptly notify the Manager of the ccTLD that the ccTLD shall be removed from the Root Zone five (5) years (Default Retirement Date) from the date of this notice (Notice of Removal) unless a Retirement Plan (see following sections for details) which is agreed to by the Manager and the IFO stipulates otherwise and is in accordance with this Retirement Policy.

The IFO shall include with the Notice of Removal a document describing the reasonable requirements (Reasonable Requirements Document) it expects of a Retirement Plan and note that the IFO will make itself available to the Manager to assist in the development of such a plan should the Manager request it.

4.3 Setting a Date for Retirement

The IFO cannot request that a retiring ccTLD be removed from the Root Zone less than five (5) years from the date the IFO has sent the Notice of Removal (Section 4.2 of this Policy) to the retiring ccTLD Manager unless an alternate Retirement Date is mutually agreed to by both the ccTLD Manager and the IFO. If the Manager wishes to request an extension to the Default Retirement Date, it must request this from the IFO as part of a Retirement Plan.

The IFO must remove a retiring ccTLD from the Root Zone no later than ten (10) years after having sent a Notice of Removal to the ccTLD Manager (Maximum Retirement Date).

4.4 Retirement Plan

After receiving a Notice of Removal, the Manager must decide if it wishes to request an extension to the Default Retirement Date.

If the Manager of the retiring ccTLD does not wish an extension to the Default Retirement Date stated in the Notice of Removal it is expected, but not mandatory, that the Manager produce a Retirement Plan for the ccTLD which would typically include:

- A copy of the Notice of Removal
- Date the ccTLD is expected to stop taking registrations, renewals and transfers that exceed the Date of Removal from the Root Zone. It is important to note that there is a reasonable expectation that the date provided is the earliest practical date for implementing this.
- Details of a communications plan to advise the registrants of Retirement of the ccTLD.

If the Manager of the retiring ccTLD wishes to request an extension beyond the Default Retirement Date stated in the Notice of Removal, it must produce a Retirement Plan which is acceptable to the IFO and is in accordance with the conditions listed below.

Granting an extension to the Default Retirement Date is at the discretion of the IFO and shall not be unreasonably withheld. The Reasonable Requirements Document that the IFO will have included with the Notice of Removal will describe the factors it will consider when evaluating a request for an extension to the Default Retirement Period.

A Retirement Plan which requests an extension shall include, in addition to the previously listed items, the following:

- The length of the extension requested (a maximum of five (5) additional years) including the proposed Date of the removal of the ccTLD from the Root Zone.
- The reasons for requesting an extension as well as an impact analysis which supports the reasons for making the extension request.

If the ccTLD Manager wishes to produce a Retirement Plan it must do so within twelve (12) months of the IFO having sent the Notice of Removal to the Manager of the retiring ccTLD. At its discretion the IFO can

extend the twelve (12) month limit to a maximum of twenty-four (24) months in total after receiving a request for such an extension from the Manager. If the IFO grants such an extension it shall promptly notify the Manager of this.

If the ccTLD Manager submits a Retirement Plan to the IFO, the IFO shall provide a definitive response to the Manager regarding the request for an extension within ninety (90) calendar days of such a request being received by the IFO.

The response by the IFO, if positive, shall state the length of the extension which has been granted. If the response is negative, the IFO shall include the specific reasoning for the refusal. The approval of an extension request shall not be unreasonably withheld.

If the request for an extension is rejected and the ccTLD Manager believes that the rejection is unreasonable or is inconsistent with the Reasonable Requirements Document, it may appeal the decision by the IFO (see Section 5.2 of this Policy).

If the Manager of the retiring ccTLD and the IFO cannot agree on a Retirement Plan within twelve (12) months, or up to a maximum of twenty-four (24) months if the IFO has granted such an extension, of the IFO having sent the Notice of Removal to the Manager, then the IFO will promptly advise the Manager that the ccTLD shall be removed from the Root Zone 5 years from the date the IFO has sent the Notice of Removal to the Manager of the retiring ccTLD.

4.5 Exception Conditions

If the Manager becomes non-functional after a Retirement Plan is accepted the IFO can use the same procedure outlined in the Requirements section to Transfer the ccTLD to a new Manager. In such cases the Retirement Date set with the previous manager shall not change unless it is in accordance with this Retirement Policy.

If the Manager breaches the Retirement Plan the IFO should work with the Manager to reinstate the Retirement Plan. If this is not possible the IFO can advise the Manager that it will maintain the Default Retirement Date from the Notice of Retirement.

5. Oversight & Review Mechanism

5.1 Oversight

This Policy is directed at ICANN and the IFO as the entity that performs the IANA Naming Functions with respect to ccTLDs.

This Policy is not intended and shall not be interpreted to amend the way in which ICANN interacts with the IFO and the delineation of their roles and responsibilities.

This Policy will not change or amend the role that the ICANN Board of Directors has with respect to individual cases of ccTLD Delegation, Transfer and Revocation, which is understood to be limited to a review to ensure that the IFO (staff) has followed its procedures properly. It is important to note that the IFO decisions to 1. notify the ccTLD Manager of the Retirement and 2. remove a ccTLD from the Root Zone Database, are of out scope for this Policy (see Section 2).

5.2 Review Mechanism

In this Policy on Retirement, decisions have been identified which shall be subject to a Review Mechanism. These decisions are:

1. The IFO initiating the Retirement Process for a 2 letter Latin ccTLD which does not correspond to an ISO 3166-1 Alpha-2 Code Element following the ISO 3166-1 MA making a change to this entry (other than making it an ISO 3166-1 Alpha-2 Code Element). If the ccTLD Manager disagrees with the IFO's decision to initiate the Retirement Process it can appeal the decision using the ccTLD appeals mechanism.
2. The IFO refusing to grant a request by the ccTLD Manager for an extension to the Default Retirement Date of its ccTLD (section 4.4). If the ccTLD Manager disagrees with the IFO's decision to refuse the request for an extension it can appeal the decision using the ccTLD Review Mechanism.

The Review Mechanism for relevant decisions pertaining to the Delegation, Transfer, Revocation or Retirement of ccTLDs is subject of a separate Policy development effort. Once the Policy is adopted by ICANN the decisions mentioned above in this section shall be subject to the Review Mechanism.

6. Stress Testing

6.1 Definition of Stress Testing

Stress Testing is defined as:

- Test the process as developed by applying the process to "corner case" situations and understand whether such a case results in an unwanted outcome or side effects.
- If the outcome of that situation results in an unwanted outcome or side effects adjust Policy/Process as needed.

After completion of the draft process the Stress Testing was conducted through answering the following questions:

- What is the outcome of this situation when the process is invoked?
- Is the outcome of that situation/the result unwanted or are side effects unwanted/unacceptable?
- Does the Policy/Process need to be adjusted/refined?

6.2 Identified Situations Where Adjustment/Additional Work May be Needed

The Working group identified the following 16 situations:

i. ***Significant names change of a country (resulting in change of ccTLD)***
Examples are:
- ZR (Zaire) to CD (Congo, Democratic Republic of) (1997)
- TP (East Timor) to TL (Timor-Leste) (2002)

ii. ***Domain Names under management at removal Date***
At the agreed end-date (Date of Removal from the Root Zone Database) Second Level domain names are still under management of the ccTLD Manager, despite reasonable efforts from the ccTLD Manager to end registrations.

iii. ***Breach of Retirement Agreement***
Various situations:
- The ccTLD Manager continues to promote the ccTLD and accepts registrations during the Retirement Process. Does it make a difference if at Removal Date there are no SLDs under management or the number of registrations under management has not declined or has even increased compared to the number at the date of the Retirement Notification?
- The ccTLD Manager stops all activities i.e. goes off-line.
- The ccTLD Manager takes no action resulting in serious deterioration of the zone.

iv. ***The ccTLD Manager goes bankrupt after Notification of Retirement***

v. ***Request for Transfer after the Retirement Notice is sent***
- Retirement is the result of significant name change.
- Retirement is the result of the dissolution of the country and significantly interested parties cannot be identified.

vi. ***ccTLD Manager ends membership of the ccNSO and claims policies (Retirement & RFC1591/FoI) are therefore not applicable***
Note: The ccNSO Council recently established that membership in the ccNSO, by definition, ends when entity listed as the ccTLD Manager is no longer listed as such in the Root Zone Database, implying that for the duration of the Retirement Process membership of the ccNSO does not end, unless it is actively terminated by the Manager.

vii. ***Country Code was removed from the list of Assigned codes because the country dissolved and the Code was re-assigned shortly afterwards (within ten (10) years) to another country added to the list***

viii. ***Uncertainty about authoritativeness of lines of communication between the ccTLD Manager and IFO***
The identity of the authoritative entities is not clear during the Retirement Process.

ix.   ***Breach of Agreement due to conflicts of laws***
        Due to court injunction

        Due to applicable national law / Court order

 x.   ***Breach of Agreement during extension period***

xi.   ***Island state disappears, but interests intend to keep ccTLD "alive"***

xii.   ***Unforeseen technical consequences/significant consequences affecting other TLDs/DNS in general***

xiii.   ***Country disappears/ however there is a clear successor state***

xiv.   ***Decision by ISO 3166 MA to remove country code is completely out of line, in breach of ISO 3166 or ISO rules***

xv.   ***Assets of the ccTLD go to another party during removal process***

xvi.   ***Does the Retirement Policy apply to a pending Retirement case?***

Each of these situations (i-xvi) was extensively discussed and resulted in the need to include a specific mechanism for the Transfer of a ccTLD after the Notice of Removal has been sent, to allow for an expedient and "administrative" Transfer to ensure an orderly Retirement Process. The results of the discussions and references to the relevant sections in the proposed Policy or other relevant Policy documents is included in the table "Result of Stress Test per identified situation" (Annex A).

7 Process to Date

After the call for volunteers and appointment by the ccNSO Council of the members (see Annex D, listed members, observers and experts and staff support) the ccPDP3 Retirement Working Group held its first conference call and commenced its work in June 2017. In total the WG has met 70 times, of which 9 times in person during ICANN meetings starting at the Johannesburg meeting in June 2017 (ICANN59) and 61 times through conference calls.

In the course of its work the original timeline and schedule as included in the Issue Report, was updated twice (March & December 2019).

The first work item the WG completed was on the Rules of Engagement i.e. the internal procedures for interaction and decision-making, which guided the activities of the WG members (see: https://community.icann.org/pages/viewpage.action?pageId=64081623&preview=/64081623/8998151 8/roe.draft.2017-08-17%20closed.pdf)

As of ICANN60 (in Abu Dhabi, United Arab Emirates) and at every following meeting the ccPDP3 Retirement WG informed the ccTLD community and members of the Governmental Advisory Committee present at the respective ICANN meetings about its progress.

At the Kobe meeting (ICANN64), the ccTLD Managers which were present expressed their initial support for the proposed method and process, including its proposed duration. At the Montreal meeting (ICANN66) the ccTLD Managers which were present expressed their support for the proposals with respect to the decisions that should be subject to oversight and the Review Mechanism.

At the Montreal meeting (ICANN66), the chair and vice-chair of the ccPDP3 Retirement WG conducted an extensive on-boarding session for members of the Governmental Advisory Committee.

In May 2020 the proposed method and process for the Retirement of ccTLDs was published for public comment. The public comment period closed on 10 July 2020. In total seven (7) comments were received. After considering all the comments received the proposed method and processes were not adjusted. The responses of the WG on the comments received are included in Annex C, "Annex C: Community Comments on Interim Paper".

At the ICANN69 meeting (October 2020) the ccTLD Managers participating in the virtual meeting expressed their support for the proposals.

Finally, the ISO 3166 standard was amended recently (version 4, 2020). The major change was the explicit reference to the Online Browsing Platform (which visualizes the ISO 3166 Code Elements) as part of the Standard. In addition, the description of the codes has been updated. The WG updated Annex B accordingly and reviewed the terminology as used throughout the proposed Policy recommendations and concluded that no adjustments were needed.

In accordance with the Charter, this paper will be sent to the Issue Manager. After consulting the ccTLD Managers present at ICANN69 along with the request to separate this part from the second part of ccNSO Policy Development Process 3, the Policy recommendations contained in this paper will be taken to the ccNSO Council and ccNSO Members for decision-making.

As part of the development of the Retirement Policy, the Working Group has created and used background documentation such as the description of the Retirement cases to date. Although not part of the Policy as proposed, this material was very helpful in providing an understanding of the context and impact of the Retirement of ccTLDs. The background material, including the presentations by the Working Group and to the Working Group can be found on the webpage of the Retirement Working Group[5].

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[5] https://ccnso.icann.org/en/workinggroups/pdp-retirement.htm

8. References

- Domain Name System Structure and Delegation (RFC 1591), March 1994 -- https://www.ietf.org/rfc/rfc1591.txt
- ccNSO Delegation and Redelegation Working Group: Final Report on the Retirement of ccTLDs, March 2011 - http://ccnso.icann.org/workinggroups/drd-wg-retirement-report-07mar11-en.pdf
- Framework of Interpretation of Current Policies and Guidelines Pertaining to the Delegation and Redelegation of country-code Top Level Domain Names, October 2014 - http://ccnso.icann.org/workinggroups/foi-final-07oct14-en.pdf
- ISO 3166-1:2013, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes* - http://www.iso.org/iso/country_codes
- Response to the IANA Stewardship Transition Coordination Group Request for Proposals on the IANA Stewardship Transition from the Cross Community Working Group on Naming Related Functions, June 2016, Annex O: ccTLD Appeals Mechanism Background and Supporting Findings, Sections 414-428 - https://community.icann.org/download/attachments/53779816/FinalTransitionProposal_11June.pdf?version=1&modificationDate=1434047705000&api=v2
- Relevant IANA Reports on the Retirement of ccTLDs - https://www.iana.org/reports
- Relevant Decisions ICANN Board of Directors - https://features.icann.org/resolutions
- Issues to explore and define with respect to the retirement of ccTLDs, Working Group Issue Paper, January 2017 - https://community.icann.org/download/attachments/64068742/Issues%20to%20explore%20and%20define%20with%20respect%20to%20the%20Retirement%20of%20ccTLDs-%20v3.pdf?version=1&modificationDate=1491820583082&api=v2

Annex A: Result of Stress tests per identified situations

Item #	Situation	Result	Relevant section Policy and / or other document if any	Adjustment if any
I	Significant names change of country	No need to adjust the Policy. Significant name change as defined though ISO 3166 standard is one of the causes to remove country code.	Section 2	None
ii	Domain Names under management at removal date. S	Whether significant number under management or only a limited set, is not relevant. There is a need to avoid gaming the system. Rationale for Retirement process is to accommodate new ccTLDs per RFC 1591	Section 4.3 and RFC 1591	None
iii	Breach of Retirement Agreement ccTLD Manager promotes SLD post Retirement notice ccTLD stops all activities ccTLD Manager does not take any action	Process continues if agreed, Compliance is not applicable. IFO may invoke Revocation	Section 4.3 proposed Policy, Section 4 FoI	None
iv	The ccTLD Manager goes bankrupt after Notification of Retirement	May become a Security and stability issue: IFO assess on case-by case basis. substantively it is responsibility of operator. Revocation may be warranted if threshold for Revocation is met.	Section 4 FoI	None
v	Request for Transfer after the Retirement Notice is sent	There is a gap in current Policy (RFC 1591 and section 3 FoI). No specific mechanisms for expedient and "administrative" Transfer specifically targeted at orderly Retirement process.	RFC 1591, Section 3 FoI	Need to include specific mechanism targeting Retirement
Vi	ccTLD Manager ends membership of the ccNSO	Policy is by definition only targeted at ICANN see Annex C of the ICANN Bylaws).It is up to ICANN to decide whether membership of the ccNSO is relevant in individual cases.	Annex C Section 3, of the ICANN Bylaws on the scope of the ccNSO Policy Development Process	None
vii	Country Code was re-assigned shortly after removal (within 10 years)	Currently considered impossible.	ISO 3166	None

Item #	Situation	Result	Relevant section Policy and / or other document if any	Adjustment if any
	to another country added to the list			
viii	Uncertainty about authoritativeness of lines of communication between ccTLD Manager and IFO. Is ccTLD Manager or its administrative contact authoritative and authorized to take the decision	The IFO deals with a Functional Manager, and if required may Transfer to a new entity which is Functional. In addition, section 3.1 of the FoI provides a sensible basis to expect that the IFO seeks contact with the ccTLD Manager and relevant decision-making entity of the ccTLD Manager.	Section 3, Functional Manager (proposed Policy) Section 3.1 FoI	None
ix	Breach of Agreement/Plan, resulting from conflict of laws: Court Injunction to applicable Law/ Court order	The Retirement plan must be subject to legally binding court order in the jurisdiction.		None
x	Breach of agreement during extension period	This situation could be handled, depending on reason, through proposed and existing Policy. In case of "bad faith" or significant misbehaviour, Revocation may be way to address issue.	Section 4.5 of proposed Policy, Section 4 FoI	None
xi	Island state disappears, but interests (was: "commercial Interests" intended to keep ccTLD "alive"	If the code element is removed, the ccTLD is eligible for Retirement. Reason for removal is not of relevance.	RFC 1591: IANA is not in business of deciding what is and what is not a country	None
xii	Unforeseen technical consequences/significant consequences affecting other TLDs and the DNS in general. Nameservers for Domain names not under ccTLD, are still under ccTLD to be removed.	Communication to customers is part of the Retirement plan. In addition, the removal of ccTLD is predictable and foreseeable process. There should be no surprises. Customers should know where their essential services are hosted.	Section 4.4 of proposed process.	None
xiii	Country disappears/ however there is a clear successor state	Countries do not disappear overnight. It takes some time before ISO-code is removed. In addition, the decision to remove country code is not part of the Policy	ISO 3166 Standard	None

Item #	Situation	Result	Relevant section Policy and / or other document if any	Adjustment if any
xiv	Decision by ISO 3166 MA to remove country code is completely out of line, in breach of ISO 3166 or ISO rules	The decision to remove a country code is not part of the Policy and ICANN should not be involved in the process of the removal of a country code, independent of merits of the decision. Reasonably predictable decisions over the past years. This is not an issue for the Policy, but an issue for the ISO3166 MA and the ISO itself. No need to adjust the Policy.	RFC 1591: The IANA (ICANN) is not in the business to decide what is and what is not a country. ISO has a process for adding (and removing) country codes.	None
xv	Assets of the ccTLD go to other party during removal process.	Receiving end will be aware of the issues: Retirement of the ccTLD. No surprises for them. Even if ccTLD Manager would go bankrupt. People in the country will know about the removal and Retirement process.	Section 4.4 of proposed process	None
xvi	Does the Retirement Policy apply to pending Retirement case? Clarification: where under the current operational practices, 1 of the ccTLDs is considered ineligible	The WG believes the applicability of the Policy to existing situations or those emerging before the proposed Policy becomes effective is out of scope of its mandate. For situations prior to this Policy coming into force, responsibility lies with the IFO to create a suitable procedure. The WG suggests that such a procedure could be based on and anticipates on the proposed Policy.	Section 1.2 and section 3 of this document	See footnote 2 Section 1.2

Annex B: Overview of the terminology used in the context of the Retirement of ccTLDs

IANA Naming Function terminology

Notes with respect to terminology in context of IANA Naming Function.

The column "USED in" refers to the ICANN Board and IANA reports relating to the ccTLD mentioned.

Term/Practice	Definition/description	Used in:	Comment
Not assigned		.UM (2007)	Needs to be defined
Retired; Term retired is listed as such in IANA		.AN (2010)	Process concluded in 2015
Retired; not included in IANA Root Zone Database, no record in https://www.iana.org/domains/root/db		.YU (2007) .TP (2002)	.YU Process concluded in 2009, .TP process concluded in 2015
unallocated (ccTLDs)		.UM case report (2007)	
Disposition of Top Level Domain		.AN case report (2010)	
Removal of ccTLDs		.UM case	
Retirement of (cc)TLD			Not defined in FoI nor by DRD WG in its final report
Revocation	The process by which the IANA Operator rescinds responsibility for management of a ccTLD from an incumbent Manager.	Section 3.5 of RFC1591	FOI note: Section 3.5 of RFC1591 explicitly contemplates Revocation appropriate In cases of persistent problems with the proper operation of a domain

Specific terminology derived from the ISO 3166 Standard.

Included is basic terminology included in the ISO3166 Standard, which was identified by the ccPDP3 Retirement WG in the context of developing the process for the Retirement of ccTLDs. Some of these terms are also used in the context of ccPDP4.

Notes with respect to the terminology derived from the ISO 3166 Standard:

- In this overview a distinction is made between terminology defined in the 2013 and 2020 editions of the Standard and the ISO Online Browsing Platform (OBP). The terminology defined in the

Standard is included in the table in normal font. The terminology used in the Online Browsing Platform is *emphasized*.

- The definitions contained in the Standard are considered to take precedent. Terminology from the Online Browsing Platform is only included for informational purposes. It is strongly advised not to use or refer to the informational terms in Policy and Policy related documents.

- A new version of ISO 3166 was published very recently (2020). The major change is that the table of country codes is no longer part of the printed standard but online as part of the ISO Open browser Platform (iso.org/obp). The text of the standard reflects this change with some additional definitions. Also, there are non-substantial changes to other definitions to abide to the new ISO guidelines for writing and publishing standards.

Term/Practice	Definition/Description	Defined in:	Comment	ISO 3166: 2020 terminology
Assigned (or allocated) code elements	The result of applying the principle of visual association between the country names (in English or French, or sometimes in another language) and their corresponding code elements.	ISO Standard Section 5.1		Section 5.2: The principle behind the alphabetic codes in the code corresponding to this document is a visual association between the country names (in English or French, or sometimes in another language) and their corresponding code elements. In applying this principle, the code elements have generally been assigned on the basis of the short names of the countries, thus avoiding, wherever possible, any reflection of their political status. The distinguishing signs for road vehicles reported by the contracting parties to the Conventions on Road Traffic (1949 and 1968; see Reference [21]) provided the major source for code elements for the code corresponding to this document.
Unassigned	NOT DEFINED IN THE STANDARD			Mentioned in 3.10. status of alpha-2 country code element (in the OPB) information whether the code element is assigned, unassigned or reserved transitionally, exceptionally, or for an indeterminate period

Term/Practice	Definition/Description	Defined in:	Comment	ISO 3166: 2020 terminology
Unassigned	*Code Elements that have not been assigned to country names.*	ISO Online Browsing Platform	Defined in OBP. As this is not defined in the Standard it is only included for informational purposes and use in Policy rules should be avoided.	
Deletions from the list of country names	Deletions from the list of country names shall be made on the basis of information from the United Nations Headquarters, or upon the request of a member of ISO 3166/MA. The ISO 3166/MA shall decide upon deletion, on the basis of the information given. ISO3166-3 provides the list of country names deleted in this part of ISO 3166 since its first edition in 1974.	ISO Standard Section 7.3		Section 7.4. Deletions from the list of country names shall be made on the basis of information from the United Nations Headquarters, or upon the request of a member of ISO 3166/MA. The ISO 3166/MA shall decide upon deletion, on the basis of the information given. ISO3166-3 provides the list of country names deleted in this part of ISO 3166 since its first edition in 1974.
Reservation of Code Elements	Some code elements are reserved. For a limited period when their reservation is the result of the deletion or alteration of a country name. For an indeterminate period when the reservation is the result of the application of international law or of exceptional requests.	ISO Standard Section 7.5 & 7.5.1		Now in Section 7.6 & 7.6.1
Reallocation Period	Some code elements are r For a limited period when reservation is the result of the deletion or alteration of a country name.	ISO Standard Section 7.5.2		*Section 7.6.2 New text* Country code elements that the ISO 3166/MA has altered or deleted should not be reassigned during a period of at least fifty years after the change. The exact period is determined in each case

Term/Practice	Definition/Description	Defined in:	Comment	ISO 3166: 2020 terminology
	For an indeterminate period when the reservation is the result of the application of international law or of exceptional requests.			on the basis of the extent to which the former code element was used.
Transitionally Reserved	NOT DEFINED IN THE STANDARD			Mentioned in 3.10. status of alpha-2 country code element (in the OPB)
	Codes that are reserved during a transitional period while new code elements that may replace them are taken into use. This results from changes in the standard.	ISO 3166 Online Browsing Platform Glossary.	This description is not included in the Standard. It is only included in this document for informational purposes and use in Policy rules should be avoided.	
Period of Non-Use	Certain code elements existing at the time of the first publication of the ISO 3166 country codes and differing from those in this part (ISO 3166-1) should not be used for an indeterminate period to represent other country names. These code elements should be included in the list of reserved code elements and should not be reallocated during a period of at least fifty years after the date the countries or organizations concerned have discontinued their use.	ISO Standard 7.5.3		Now section 7.6.3. Certain country code elements existing at the time of the first publication of the ISO 3166 country codes and differing from those in this part of ISO 3166 should not be used for an indeterminate period to represent other country names. This provision applies to certain vehicle designations notified under the 1949 and 1968 Conventions on Road Traffic.

Code elements to which this provision applies should be included in the list of reserved code elements (see 7.6.5) and should not be reassigned during a period of at least fifty years after the date when the countries or organizations concerned have discontinued their use. |

Term/Practice	Definition/Description	Defined in:	Comment	ISO 3166: 2020 terminology
Exceptionally Reserved	Code elements may be reserved, in exceptional cases, for country names which the ISO 3166/MA has decided not to include in this part of ISO3166, but for which an interchange requirement exists. Before such code elements are reserved, advice from the relevant authority must be sought.	ISO Standard 7.5.3		Now Section 7.6.4
Exceptionally Reserved	*Codes that have been reserved for a particular use at special request of a national ISO member body, governments or international organizations.*	ISO 3166 Online Browsing Platform Glossary.	This description is not included in the Standard. It is only included in this document for informational purposes and use in Policy rules should be avoided. For example, the code UK has been reserved at the request of the United Kingdom so that it cannot be used for any other country.	Section 7.6.4 Code elements may be reserved, in exceptional cases, for country names which the ISO 3166/MA has decided not to include in the code corresponding to this document, but for which an interchange requirement exists. Before such code elements are reserved, advice from the relevant authority should be sought.
Reallocation	Before reallocating a former code element or a formerly reserved code element, the ISO3166/MA shall consult, as appropriate, the authority or agency on whose behalf the code element was reserved, and consideration shall be given to difficulties which might arise for the reallocation.	ISO Standard Section 7.5.5		Section 7.6.3. See the entry above: **Period of non-use**

Term/Practice	Definition/Description	Defined in:	Comment	ISO 3166: 2020 terminology
Indeterminately Reserved	NOT DEFINED IN THE STANDARD			This is mentioned in 3.10. status of alpha-2 country code element (in the OPB)
Indeterminately Reserved		ISO 3166 Online Browsing Platform glossary.	This description is not included in the Standard. It is only included in this document for informational purposes and use in policies should be avoided. For example, several codes have been reserved by the World Intellectual Property Organization (WIPO) because they have been used in its Standard ST.3.	
Country Name	Name of country, dependency, or other area of particular interest	ISO Standard Part 1 Section 3.4		Section 3.4 (OBP 3.14-3.18, 3.22)
Country Code	Listing of country names with their representations by code elements	ISO 3166 Part 1 Section 3.3		Section 3.3 (OBP 3.10-3.13)
Code Element	The result of applying a code to an element of a coded set	ISO 3166 Part 1 Section 3.2		Section 3.2 (OBP 3.10-3.13)
Code	Set of data	ISO 3166 Part 1 Section 3.1		Section 3.1, changed definition: set of data transformed or represented in different forms according to a pre-established set of rules
List of Country Names	Part of the Clause 9 list	ISO 3166 Part 1 Section 6, 6.1. In clause 6 of part 1 the		The whole clause disappeared. The list is replaced with the ISO Open Brower Platform portal. and that is therefore there are definitions 3.xx in the standard

Term/Practice	Definition/Description	Defined in:	Comment	ISO 3166: 2020 terminology
		content of the list is enumerated in Clause 9.		
Formerly Used Codes	NOT DEFINED IN THE STANDARD			Defined in Part 3, Section 3.3.3 **alpha-4 formerly used country code element** coded representation of country no longer in use
Formerly Used Codes	*Codes that used to be part of the standard but that are no longer in use. See alpha-4 codes.*	ISO 3166 Online Browsing Platform	As this is not described in the Standard it is only included for informational purposes and use in Policy rules should be avoided.	

In addition to the list of Country Codes (as defined above), the Online Browsing Platform displays:

- List of formerly used codes
- List of Indeterminately reserved codes
- List of Transitionally reserved codes
- List of exceptionally reserved codes
- Un-assigned codes

Annex C: Community Comments on Interim Paper

TITLE: ccNSO PDP3 Initial Proposals for Process to Retire ccTLDs

Section I: General Overview and Next Steps

Purpose: The ccNSO Policy Development Process 3 (PDP3) Working Group, tasked with developing and proposing Policy for the Retirement of country code Top-Level Domains (ccTLDs), is seeking input and feedback from the broader community on its proposed process to retire ccTLDs, when the country code is deleted from list of country codes in the ISO 3166 standard.

Current Status: The Interim Paper is the first step in documenting the recommended Policy for the Retirement process of ccTLDs.

Next Steps: After closure of the Public Comment period, the Working Group will review the comments received and take into account in developing a final set of Policy recommendations.

Section II: Contributors

At the time this report was prepared, a total of seven (7) community submissions had been posted to the forum. The contributors, both individuals and organizations/groups, are listed below in chronological order by posting date with initials noted. To the extent that quotations are used in the foregoing narrative (Section III), such citations will reference the contributor's initials.

Organizations and Groups:

Name	Submitted by	Initials
Business Constituency	Steve del Bianco	BC
Registry Stakeholder Group	Samantha Demetriou	RySG
At-Large Advisory Committee	ALAC staff	ALAC
Russian Institute for Public Networks	Evgeny Kuskevich	RIPN
Domainregistry.de	Hans-Peter Oswald	HPO

Individuals:

Name	Affiliation (if provided)	Initials
Clement Gentry		CG
Lawrence Owala-Roberts	Microboss, Nigerian Internet Registry Authority (NIRA), Business Constituency	LOR

Summary of Comments, References to Interim Paper, WG Response

General Disclaimer: This section intends to summarize broadly and comprehensively the comments submitted to this public comment proceeding but does not address every specific position stated by each contributor. The preparer recommends that readers interested in specific aspects of any of the summarized comments, or the full context of others, refer directly to the specific contributions at the link referenced above (View Comments Submitted).

The WG wishes to thank all commenters for their input.

Background on the relationship between ccTLD Managers, the ccNSO and ICANN;
The WG believes that this general background information will be relevant to many its responses to comments:

Firstly, it should be noted that only a limited group of ccTLD Managers have entered into an arrangement with ICANN (ranging from sponsorship agreements to Accountability Frameworks or an Exchange of Letters) as such arrangements are voluntary. These arrangements are mainly focused on ensuring the security and stability of the internet and enforceability of these is limited and may only apply to Sponsorship agreements.

Secondly, almost all, if not all, ccTLD Managers agree that they are subject to RFC 1591(which is applied by ICANN/IFO). where most of RFC 1591 is focused on the Delegation and Transfer of ccTLDs including Transfers for issues of significant misbehaviour. Any additional policies developed by the ccNSO are limited in scope to Add, Change and Delete of ccTLD entries in the Root Zone (see Annex C of the Bylaws for details on the applicable scope for ccNSO policies). A simple example of this is that neither RFC 1591 nor ccNSO policies can affect registration policies of a ccTLD or require any type of access to ccTLD data. As such neither the ccNSO nor ICANN can require ccTLDs to undertake any specific actions with respect to their registrants

Thirdly policies developed through the ccNSO are only applicable to ccTLD Managers which are members of the ccNSO. Although a ccTLD Manager which is not a member of the ccNSO is not subject to policies developed by the ccNSO, ICANN can still act with respect to such a ccTLD Manager.

General comments
The ALAC, RySG, and BC explicitly supported the proposed approach, definitions, and descriptions. In addition, each of these groups raised some points for consideration.

The other contributors (LOR, HPO, CG, and RIPN) focused on specific topics and did not comment on the general approach, definitions, and descriptions.

Specific comments
1. The ALAC requests that two points be considered from an end-user perspective: 1. Removal of a TLD will mean less likelihood for confusion as usually the removal of one would make room for a new one, and 2. Retirement could pose a problem for some registrants when they are used to an "old" address which will become obsolete after Retirement of the ccTLD.

    Reference in Interim Paper:
    o Annex A. Result of Stress Test per Identified Situations # 2 - Domain Names under management at Removal Date - Whether there is a significant number under management or only a limited set is not relevant. There is a need to avoid gaming the system. The rationale for the Retirement process is to accommodate new ccTLDs per RFC 1591.
    o Annex A. Result of Stress Test per Identified Situations # 12 - Unforeseen technical consequences/significant consequences or others affecting TLDs/DNS in general. Name Servers for Domain Names not under ccTLD, are still under ccTLD to be removed - Communication to customers is part of the Retirement Plan. In addition, the removal of a ccTLD is a predictable and foreseeable process. There should be no surprises. Customers should know where their essential services are hosted.

    WG Response: The WG has discussed and considered the issue of the impact of removal of a ccTLD from the Root Zone Database File extensively as part of its Stress Testing of the Policy and believes that the time allocated for the Retirement of a ccTLD will significantly mitigate any issues associated with using "old" domain names.

Does Paper need to be amended DRAFT? N

2. The ALAC noted that the replacement of a non-Functional Manager should be transparent and follow due process. In addition, the IFO and the Functional Manager should work together in good faith and ensure the interests of registrants are taken into account.

    Reference in Interim Paper:
    *   Section 3, final two sentences (page 5) - If a ccTLD is to be retired but does not have a Functional Manager the IFO cannot Transfer responsibility to a new Manager according to its standard process. This set of circumstances would create a deadlock situation which would prevent the IFO from ever retiring the ccTLD. To avoid such a deadlock, and only under these specific conditions, this Policy allows the IFO to proceed with a Transfer of responsibility for the ccTLD to establish a Functional Manager and ensure the ccTLD can be retired. Such a Transfer should follow the standard IFO Transfer process where possible.
    *   Annex A. Result of Stress Test per Identified Situations # 5 - Request for Transfer after the Retirement Notice is sent. – There is a gap in current Policy (RFC 1591 and section 3 FoI). No specific mechanisms for expedient and "administrative" Transfer specifically targeted at orderly Retirement process.

    WG Response: The WG agrees with spirit of the ALAC comment but notes the following from Section 3 of the Interim Paper with respect to the first part of the comment:

    > "For the purposes of this Policy a "Functional Manager" is the entity listed as "ccTLD Manager" in the IANA Root Zone database or any later variant, who is active with respect to the management of the ccTLD or with whom the IFO can officially and effectively communicate.

    > If a ccTLD is to be retired but does not have a Functional Manager, the IFO cannot Transfer responsibility to a new Manager according to its standard process. This set of circumstances would create a deadlock situation which would prevent the IFO from ever retiring the ccTLD. To avoid such a deadlock, and only under these specific conditions, this Policy allows the IFO to proceed with a Transfer of responsibility for the ccTLD to establish a Functional Manager and ensure the ccTLD can be retired. Such a Transfer should follow the standard IFO Transfer process where possible.".

    As to the second point section 4.1 of the draft Policy states: "There is a good faith obligation for both the IFO and the Manager of the retiring ccTLD to ensure an orderly shutdown of the retiring ccTLD which takes into consideration the interests of its registrants and the stability and security of the DNS.".

Does Paper need to be amended DRAFT? N

3. Finally, ALAC noted that the Review Mechanism to be used is not clear, nor is clear what exactly will be subject to a Review Mechanism.

Reference in Interim Paper:
- Section 5.2 (page 8) - In this Policy on Retirement decisions have been identified which shall be subject to a Review Mechanism.

WG Response: The WG notes that the decision that could be subject of the Review Mechanism is explicitly listed in the Policy. With respect to the second point the WG notes that the Review Mechanism itself is not part of the work of this WG[6] but will be dealt with in the second part of the ccNSO PDP3.

Does Paper need to be amended DRAFT? N

4. The RySG suggests clarifying that 1. the proposed Policy is not retroactively applicable and 2. The Policy does not apply to non-ccNSO members but can be used as a model.

    Reference in Interim Paper:
    o Section 3, 1ˢᵗ Paragraph (page 5) - This Policy applies to all entries in the Root Zone database which are identified as ccTLDs and are subject to a Retirement Triggering Event ("Trigger").
    o Section 5.1, 1ˢᵗ Paragraph (page 8) - This Policy is directed at ICANN and the IFO as the entity that performs the IANA Naming Functions with respect to ccTLDs.
    o Annex A. Result of Stress Test per Identified Situations # 6 - ccTLD Manager ends membership to the ccNSO. Policy is by definition only targeted at ICANN see Annex C of the ICANN Bylaws).It is up to ICANN to decide whether membership of the ccNSO is relevant in individual cases.
    o Annex A. Result of Stress Test per Identified Situations # 16 - Does the Retirement Policy apply to pending Retirement case? - The WG believes the applicability of the Policy to existing situations or those emerging before the proposed Policy becomes effective is out of scope of its mandate. For situations prior to this Policy coming into force, responsibility lies with the IFO to create a suitable procedure. The WG suggests that such a procedure could be based on and anticipates the proposed Policy.

    WG Response: The WG notes that both these topics were discussed extensively. Regarding the first point about retroactivity - Annex A. Result of Stress Test per Identified Situations # 16 states that "The WG believes the applicability of the Policy to existing situations or those emerging before the proposed Policy becomes effective is out of scope of its mandate. For situations prior to this Policy coming into force, responsibility lies with the IFO to create a suitable procedure. The WG suggests that such a procedure could be based on and anticipate the proposed Policy.". As to the second point regarding applicability to non-ccNSO members the ICANN Bylaws Section 10.1 states "Policies that apply to ccNSO members by virtue of their membership are only those policies developed according to Section 10.4(j) and Section 10.4(k) (please see the Background on the relationship between ccTLD Managers, the ccNSO and ICANN at the top of this document for a more detailed explanation.

    Does Paper need to be amended DRAFT? N

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[6] Please see the Background section of the Interim paper for further details.

5. The BC suggests two additional stress tests: 1. The confidence in the Retirement process by end-users is guaranteed, and 2. Migration of critical data is properly archived and stored for historic/research purposes. With respect to the latter test, it is suggested that ICANN/ccNSO be responsible for archiving the concerned ccTLD DNS data.

   Reference in Interim Paper:
   - Section 6.2 (page 9) – (long please see original document).
   - Annex A. Result of Stress Test per Identified Situations - (long please see original document).

   WG Response: Regarding additional stress test 1 the WG notes the purpose of the Policy, once it is official, is the guarantee for all parties, including end-users, that from the date of the Notice of Retirement that the ccTLD will be retired no less than 5 years and no more than 10 years from this date. With respect to the second additional stress test the WG notes there is no Policy or requirement on ccTLDs relative to the archiving of any ccTLD data by or for ICANN (see the Background on the relationship between ccTLDs, the ccNSO and ICANN at the top of this document). However, ICANN could offer the retiring ccTLD the option of having its Zone File data archived for historical and research purposes.

   Does Paper need to be amended DRAFT? N.

6. The BC suggests that IFO should include in its Notice of Removal a statement that the Registry should refrain from registering any new domain with validity beyond the proposed Date of Retirement.

   Reference in Interim Paper:
   - Section 4.2, second paragraph (page 6) - The IFO shall include with the Notice of Removal a document describing the reasonable requirements ("Reasonable Requirements Document") it expects of a Retirement Plan and note that the IFO will make itself available to the Manager to assist in the development of such a plan should the Manager request it.
   - Annex A, Result of Stress Test per Identified Situations # 3 - Breach of Retirement Agreement (ccTLD Manager promotes SLD post Retirement notice, ccTLD stops all activities, ccTLD Manager does not take any action) - Process continues as if agreed. Compliance is not enforceable. However, IFO may invoke Revocation.

   WG Response: The WG notes that as stated in the section Background on the relationship between ccTLD Managers, the ccNSO and ICANN - "… neither the ccNSO nor ICANN can require ccTLDs to undertake any specific actions with respect to their registrants.". The draft Retirement Policy in section 4 states "If the Manager of the retiring ccTLD does not wish an extension to the Default Retirement Date stated in the Notice of Removal it is expected, but not mandatory, that the Manager produce a Retirement Plan for the ccTLD" which includes the following requirement "•   the date when the ccTLD is expected to stop taking registrations, renewals and Transfers that exceed the Date of Removal from the Root Zone. It is important to note that there is a reasonable expectation that the date provided is the earliest practical date for implementing this;". If a Manager does wish an extension to the Default Retirement Date, then the draft Policy requires that the Manager produce a Retirement plan to obtain an extension.

Does Paper need to be amended DRAFT? N

7. The BC also suggested that IFO should mandate a periodic review of the ISO 3166-1 MA standard to create a predictable process that triggers the Notice of Retirement.

   Reference in Interim Paper:
   - Section 3 (page 5). Section 4.2, first paragraph (page 6) - Once the IFO confirms that a ccTLD should be retired and has a Functional Manager, it shall promptly notify the Manager of the ccTLD that the ccTLD shall be removed from the Root Zone 5 years ("Default Retirement Date") from the date of this notice ("Notice of Removal") unless a Retirement Plan (see following sections for details) which is agreed to by the Manager and the IFO and is in accordance with this Retirement Policy stipulates otherwise.

   WG Response: The WG notes that this is an operational issue and should not be part of the Policy. However, It is important to understand that the IFO is informed on a regular basis of any changes to the standard by the ICANN representative on the ISO3166-1 MA (ISO TC 46/WG 2)

   Does Paper need to be amended DRAFT? N

8. The BC and LOR noted that neither the proposed Policy nor the stress tests measure how registrants and key national values on the retiring ccTLD domain/servers would affect the Retirement process, especially in light of multiple data privacy laws.

   Relevant section in Interim Paper, if any: None

   WG Response: The WG notes that the issues the BC and LOR raise are outside the scope of the Policy mandate of the ccNSO as defined in Annex C of the ICANN Bylaws. The ccNSO is not in a position to develop policies directed at ccTLDs with respect to their registration policies and hence registrants (please see Background on the relationship between ccTLD Managers, the ccNSO and ICANN at the top of this section for further details).

   Does Paper need to be amended DRAFT? N

9. The BC and LOR also raise the question whether any ICANN Bylaw changes are envisioned, or mechanisms need to be restructured to help to make this process effective.

   Reference, if any, in Interim Paper: None.

   WG Response: The WG does not anticipate any Bylaw change nor does it anticipate major implementation issues. The proposed process takes into account and builds on the procedures used to date leading up to the removal of ccTLDs from the root zone file database.

   Does Paper need to be amended DRAFT? N

10. LOR notes that as brands made massive investments in various domains, they should be provided ample notice to migrate.

    Reference in Interim Paper:
    - Section 4.4, 3rd Paragraph, third bullet point (page 7) - details of a Communication Plan to advise the registrants of the Retirement of the ccTLD. If the Manager of the retiring ccTLD wishes to request an extension beyond the Default Retirement Date stated in the Notice of Removal, it must produce a Retirement Plan which is acceptable to the IFO and is in accordance with the conditions listed below.
    - Annex A, Result of Stress Test per Identified Situations # 2 - Domain Names under management at removal date - Whether there is a significant number under management or only a limited set is not relevant. There is a need to avoid gaming the system. Rationale for Retirement process is to accommodate new ccTLDs per RFC 1591.
    - Annex A, Result of Stress Test per Identified Situations # 3 - Breach of Retirement Agreement (ccTLD Manager promotes SLD post Retirement notice, ccTLD stops all activities, ccTLD Manager does not take any action) - Process continues as if agreed. Compliance is not enforceable. However, IFO may invoke Revocation.

    WG Response: The WG has discussed the impact of removal on registered domain names. The WG believes that registrants, registrars and others will have ample time to make the necessary changes given the duration of the Retirement process and the cause of the triggering event (significant change of the name of the country or its dissolution).

    Does Paper need to be amended DRAFT? N

11. With respect to duration of the proposed process:
    - LOR notes that under some circumstances 5 years may not be long enough if, for example, 10-year registrations are allowed.
    - LOR also notes that limitation of the duration makes it impossible for a registry to allow for even longer registrations and as a result that ccTLD Manager may seek redress of that situation.
    - HPO considers the five (5) year period enough time. However, he suggests that if retired ccTLD is replaced by new ccTLD grandfathering rule domain names is applied, providing right of first registration to registrants under the "old" ccTLD.

    Reference in Interim Paper:
    - Section 4.3 (page 6) - The IFO cannot require that a retiring ccTLD be removed from the Root Zone less than 5 years from the date the IFO has sent the Notice of Removal (Subsection 4.2) to the retiring ccTLD Manager unless an alternate Retirement Date is mutually agreed to by both the ccTLD Manager and the IFO. If the Manager wishes to request an extension to the Default Retirement Date, it must request this from the IFO as part of a Retirement Plan. The IFO must remove a retiring ccTLD from the Root Zone no later than 10 years after having sent a Notice of Removal to the ccTLD Manager ("Maximum Retirement Date").
    - Annex A, Result of Stress Test per Identified Situations, # 2 - Domain Names under management at Removal Date - Whether there is a significant number under management or only a limited set is not relevant. There is a need to avoid gaming the system. Rationale for Retirement process is to accommodate new ccTLDs per RFC 1591.

- Annex A, Result of Stress Test per Identified Situations, #12 - Unforeseen technical consequences/significant consequences or other situations affecting other TLDs/DNS in general. Name Servers for Domain Names not under ccTLD, are still under ccTLD to be removed. - Communication to customers is part of the Retirement Plan. In addition, the removal of a ccTLD is a predictable and foreseeable process. There should be no surprises. Customers should know where their essential services are hosted.

  WG Response: The WG has extensively discussed the duration of the Retirement process considering the situations mentioned by LOR. The proposed duration was considered reasonable and balanced (it was noted that the maximum registration period for domain names in some ccTLDs is 10 years which the Policy can allow for). With respect to the proposal of HPO, this is a matter of registration Policy of the new ccTLD Manager of the successor/new ccTLD (see Background on the relationship between ccTLD Managers, the ccNSO and ICANN at the top of this section for more details).

  Does Paper need to be amended DRAFT? N

12. LOR suggests that a Retirement plan should be mandatory, even if the Functional Manager does not want an extension of the duration of the Retirement process.

    Reference in Interim Paper:
    - Section 4.4, 2nd paragraph (page 6) - If the Manager of the retiring ccTLD does not wish an extension to the Default Retirement Date stated in the Notice of Removal it is expected, but not mandatory, that the Manager produce a Retirement Plan for the ccTLD which would typically include.

    WG Response: The WG notes that the issue LOR raises was discussed extensively by the WG and is considered outside the scope of the Policy mandate of the ccNSO. Please see Background on the relationship between ccTLD Managers, the ccNSO and ICANN at the top of this section for more information.

    Does Paper need to be amended DRAFT? N

13. LOR suggests mandatory auditing of domain name numbers by IFO to make sure the ccTLD is truly winding down and the system is not gamed.

    Reference in Interim Paper:
    - Section 4.5, Final paragraph (page 8) - If the Manager becomes non-functional after a Retirement Plan is accepted, the IFO can use the same procedure outlined in the Requirements section to Transfer the ccTLD to a new Manager. In such cases the original timeline for retiring the ccTLD shall not change. If the Manager breaches the Retirement Plan the IFO should work with the Manager to reinstate the Retirement Plan. If this is not possible the IFO can advise the Manager that it will maintain the Default Retirement Date from the Notice of Retirement.
    - Annex A, Result of Stress Test per Identified Situations # 4 - The ccTLD Manager goes bankrupt after Notification of Retirement - May become a Security and stability issue: IFO assess on case-by case basis. substantively it is responsibility of operator. Revocation may be warranted if threshold for Revocation is met.

WG Response: The WG notes that this was discussed in detail but the relationship between ccTLD Manager, the ccNSO and ICANN would not allow for this (please see Background on the relationship between ccTLD Managers, the ccNSO and ICANN at the top of this section for more information).

Does Paper need to be amended DRAFT? N

14. CG and RIPN raise concerns about the proposed irreversible impact of a trigger event leading to the removal of the ccTLD from the root zone. In view of CG and RIPN, additional conditions should be taken into account which may call for the preservation of the ccTLD, specifically: The ccTLD can still be of commercial, cultural, historical or other relevant use for a broad community and /or if there is a clear successor state, as recognized by United Nations, then the government of this state may show willingness and interest to go on with supporting the ccTLD, which otherwise could be retired

Reference in Interim Paper:
- Section 3, 2nd Paragraph (page 5) - The ISO 3166-1 list is dynamic and country codes are added and removed on a regular basis. When a new ISO 3166-1 Alpha-2 code element ("Alpha-2 code") is added, a ccTLD corresponding to that Alpha-2 code can be added to the Root by the IANA Naming Functions Operator ("IFO"). However, as was identified by the ccNSO Delegation and Redelegation Working Group in 2011, there is no formal Policy available for the removal of a ccTLD from the Root Zone when a country code is deleted from the ISO 3166-1 list of country names.
- Annex A. Result of Stress Test per Identified Situations, #11 - Island state disappears, but interests (was commercial Interests)" intend to keep ccTLD "alive" - If the Code Element is removed, the ccTLD is eligible for Retirement. Reason for removal is not of relevance.
- Annex A. Result of Stress Test per Identified Situations #13 - Country disappears/ however there is a clear successor state - Countries do not disappear overnight. Takes some time before ISO-code is removed. In addition, the decision to remove country code is not part of the Policy.

WG Response: The WG appreciates the concerns raised however these are out of scope for the ccNSO. The WG believes that RFC 1591 Section 4.2 addresses this:

"Country Codes - The IANA is not in the business of deciding what is and what is not a country."

The selection of the ISO 3166 list as a basis for country code top-level domain names was made with the knowledge that ISO has a procedure for determining which entities should be and should not be on that list."

Please see Background on the relationship between ccTLD Managers, the ccNSO and ICANN at the top of this section for more information

Does Paper need to be amended DRAFT? N

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